Corporate control and regulation:
The explain mechanism as a sign of “capture”

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Abstract  
Corporate governance regulation is a contested area. The introduction of a corporate governance code could, on the one hand, be understood as a regulatory capture performed by international institutional investors, but on the other hand, as the introduction of a code tend to involve local adaptations it could be understood as support for status quo, and hence favoring strong local interest groups. In this paper, these competing explanations are empirically tested through the analysis of non-compliance by Swedish listed corporations with different corporate control arrangements. The main findings are that corporations with a concentrated “Swedish” control situation (i.e. controlling shareholder holding more than 50% of the votes) explain significantly more than corporations with other ownership arrangements, whereas corporations with dispersed ownership (“Anglo-American” control situation) explain significantly less. This could be interpreted as that the Swedish code - regardless of controlling shareholder involvement in the regulatory process - favor corporate governance arrangements based on dispersed ownership, and hence a control situation that international institutional investors are familiar with. These findings have implications for how corporate governance codes should be understood in a global setting and what roles such codes could perform in a reform process aiming to change corporate governance arrangements.

Keywords: Corporate governance code, ownership concentration, shareholders, board of directors.

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1 Data Collection by Josefin Andersson and Linn Burman, previous students at Linnæus University, is gratefully acknowledged. Financial support by Handelsbanken Forskningsstiftelser.
Introduction

The regulation of corporate governance is a contested area (e.g. Gourevitch & Shinn, 2005; Roe, 2000). In one sense, this is somewhat surprising, given the technical character of the regulation of listed corporations (e.g. Kraakman et al, 2017). However, considering the political nature of the corporation (e.g. Djelic & Etchanchu, 2017; Scherer & Palazzo, 2011) and its importance for the creation of economic value in society, as well as for how such value is distributed among corporate stakeholders (Lazonick & O’Sullivan, 2000; Van Arnum & Naples, 2013), it is not unreasonable. Different actors, such as corporate managers, auditors, employees and a large variety of capital providers (banks, hedge funds, pension funds, controlling shareholders of various types such as families etc.) all thrive on value creation by corporate entities and, hence, have a stake in corporate governance regulation. During the last two decades, the regulation of corporate governance has become an international arena, where globalization and global capital formation have become important in relation to the accountability and transparency of listed corporations (e.g. Aguilera & Jackson, 2010; O’Sullivan, 2000), bringing issues such as minority shareholder protection to the forefront of discussions (e.g. La Porta et al, 2000). The introduction of national corporate governance codes around the world is an important part of the internationalisation of corporate governance regulation (e.g. Aguilera & Cuervo, 2004; Cuomo et al, 2016).

Corporate governance codes of best practice (henceforth codes) are sometimes considered to be “reflexive”, meaning that they are contingently adoptable to the control situation of the corporation and self-strengthening as their ongoing development is guided towards the moving target of “best practice” (Cankar et al, 2010; Veldman & Wilmott, 2016). This reflexivity is not only relevant on the corporate level, but equally relevant on the corporate governance system level. It has been argued that the global dispersion of codes is linked to the global expansion of international institutional investors (e.g. Cicon et al, 2012; Tagesson & Collin, 2016; Thomsen, 2006) as the great similarities among codes, despite overall corporate governance differences, favor such investors’ capital mobility. Following Thomsen (2006), the global dispersion of codes can be understood as a form of regulatory capture performed by international institutional investors. However, due to their reflexive nature, codes are also adaptable, and adopted, to local circumstances (e.g. Collier & Zaman, 2005; Fiss & Zajac, 2004; Larsson-Olaison, 2019). Local adaptation, thus, creates an opportunity for local interest groups to capture corporate governance regulation (e.g. Haxhi et al, 2013). In that sense, local adaptation could work against the economic interest of international institutional investors; as rather than creating similar corporate governance arrangements on the corporate level, differences in practice are institutionalized on the corporate governance system level, and hence by regulation enforcing status quo and supporting already strong local interest groups.

In this paper we set out to formulate, and empirically test, two competing hypotheses. The first hypothesis, the corporate governance reform hypothesis emphasizes the influence of international institutional investors, whereas the second, the status quo hypothesis, emphasizes the interests and influence of local economic elite groups. These hypotheses are tested in a Swedish setting, where local shareholders hold a controlling stake in circa two thirds of the listed corporations (with half of these corporations having controlling shareholders with above 50% of the votes and half having controlling shareholders with more moderate, but still considered controlling, stakes in between 20-
49% of the votes). Finally, dispersed ownership (largest owner under 20% of the votes) prevails in circa one third of the listed corporations, and these corporations can therefore be said to operate in a more “Anglo-American” corporate control context. In order to test the two competing hypotheses we study compliance with the Swedish code, as it can be argued that if corporations do not comply with the code, and therefore need to explain their deviance from it, and their specific corporate governance arrangements, then the code is not developed to meet the needs of those corporations. The existence of three, roughly equal size (in terms of number of corporations), control situations, provide a fertile ground for testing the two competing hypothesis. Previous studies of code compliance in Sweden found that about half the corporations use the possibility to explain (Achtenhagen et al, 2018) and that ownership concentration was positively related to code deviance (Tagesson & Collin, 2016). However, Tagesson and Collin focused exclusively on ownership concentration (measured by Herfindahl index), while we in this paper focus on the actual control situation that ownership concentration creates. This is important as it is not only the composition of shareholders (Herfindahl) but also the ultimate controlling shareholder exercising control, that matters for the actual governance of the corporation.

Our empirical findings indicate support for the corporate governance reform hypothesis (see further Thomsen, 2006), as corporations with dispersed ownership are significantly less likely to explain than corporations with a majority controlling shareholder, and that corporations with a majority controlling shareholder are significantly more likely to explain than corporations with a modest stake controlling shareholder. Hence, as far as comply and explain goes, it seems that the Swedish corporate governance code is best suited for corporations with dispersed ownership, and least adopted to the control situation of the corporations with majority stake controlling shareholders. The findings are interesting given the position that the controlling shareholders with more modest stakes (such as the prominent business group of Wallenberg), occupied in the code development process (Jonnergård & Larsson, 2007). The need to explain the corporate governance in corporations with such ownership arrangements - considered as the Swedish corporate governance model (e.g. Lekvall, 2009) - indicate much less local influence on the code content than what could have been expected (compare Haxhi et al, 2013). Also, the finding that majority stake controlling shareholders need to explain their corporate governance strengthens the notion that the Swedish code was not developed to meet the needs of such corporations, and helps explain the conflict among controlling shareholders for instance documented in Jonnergård & Larsson (2007) and Jonnergård & Larsson-Olaison (2017). These findings have implications for comparative corporate governance (e.g. Aguilera & Jackson, 2010) in general, and research on corporate governance codes (e.g. Aguilera & Cuervo, 2004; Cuomo et al, 2016), more specifically. Although codes often is understood as a reflexive type of regulation, where the local context and local actors is of great importance (e.g. Haxhi et al, 2013), this paper add evidence that support that code dispersion actually fosters international harmonization (e.g. Thomsen, 2006), benefiting international institutional shareholders and primary applying to corporations with dispersed ownership.
Literature review, assumptions and hypotheses formulation

The argument of this paper - that we can use the corporate governance code comply-or-explain mechanism to observe what kind of shareholders benefit from the introduction of a corporate governance code - rests on three basic assumptions:

1. A corporate governance code of best practice cannot fit all corporate control situations; that is, one size does not fit all (e.g. Hertig, 2005)
2. The comply-or-explain mechanism facilitates optimal corporate governance on the corporate level; this assumption draws on the logic that efficiency stems from the use of codes (cf. Zattoni & Cuomo, 2008).
3. Local adaptation of codes is made with regard to corporate governance fit with the politically favored control situation; that is either powerful local interests or equally powerful international interest groups (cf. Haxhi et al, 2013).

These three assumptions of the paper is presented upfront, as they are inherent to the formulation of the two competing hypotheses regarding universal importance of international institutional investors vs. status quo as enforced by local interests. The following literature review will extemporize on these assumptions based on previous research. Finally, this will result in the formulation of two competing hypotheses.

A corporate governance reform hypothesis

The diffusion of corporate governance codes throughout the world has puzzled corporate governance scholarship for a number of years (e.g. Aguilera & Cuervo-Cazurra, 2004; Aguilera & Cuervo-Cazurra, 2009; Cuomo et al, 2016; Zattoni & Cuomo, 2008). Despite well-documented cross-disciplinary variance in corporate governance arrangements throughout the world (Aguilera & Jackson, 2003; Filatotchev et al, 2013; Gourevitch & Shinn, 2005; Hall & Soskice, 2001; La Porta et al, 2000), what really stands out are the similarities in the type of rules included in these codes (Aguilera & Cuervo-Cazurra; 2004; Cicon et al, 2012; Thomsen, 2006). Thomsen (2006) describes this pursuit for similarity in codes as rent-seeking, and as a form of regulator capture performed by international institutional investors.

This streamlining of content is puzzling as the threat of minority shareholder expropriation arguably varies between different corporate control arrangements, as well as the power structure between top management and the board, while the ability to enforce a comply-or-explain-based regulation varies with conformity pressures inherent to different corporate governance systems (Aguilera & Jackson, 2003; Filatotchev et al, 2013; Gourevitch & Shinn, 2005; Hall & Soskice, 2001; La Porta et al, 2000). Typically, rules included in corporate governance codes aim to enhance minority
shareholder protection through independent directors, different board committees and similar provisions. Therefore codes are a type of regulation where agency theory is more or less “built in” (e.g. Veldman & Wilmott, 2016) and is therefore a regulation suited for a corporate control situation based on ownership dispersion, large free-rider problems among shareholders, strong managerial control and strong capital markets. In short, what Jensen & Meckling (1976) and Fama (1980) described as the context for corporate governance in the context of 1970s U.S. Thus, a corporate governance code is an efficient means to remedy control problems associated with the Anglo-American corporate governance model (Aguilera & Jackson, 2010).

However, most codes are enforced following the comply-or-explain principle (e.g. MacNeil & Li, 2006; Sergakis, 2015). This principle acknowledges the need for flexibility with regard to different corporate control settings and perhaps this is one reason for its popularity with for example the European Union (Sergakis, 2015). The need for flexibility comes from a regulator acceptance of “one-size-fits-all” not working (Hertig, 2005; MacNeil & Li, 2006; Sergakis, 2015). As such, the use of explanations in corporate reports could be understood as a method to enhance the efficiency of corporate level corporate governance, when the applicable code does not satisfy corporate needs.

In line with the above, we claim that the diffusion of corporate governance codes is linked to an international regulatory movement of enhancing stronger corporate governance, as previously found by Thomsen (2006). Corporations with a deviant (non-Anglo-American) corporate control situation may, however, have different needs and will then not comply with the code and instead need to explain their reasons for not doing so.

Hypothesis 1a: Dispersed ownership is positively related to code compliance.

Hypothesis 1b: The existence of controlling shareholders are negatively related to code compliance.

A status quo hypothesis

However, it has been shown that there is significant space for variety within the seemingly harmonized world of corporate governance codes. First, the comply-or-explain mechanism paired with rather lax enforcement puts great discretion in the hands of the regulated actors (e.g. Collier & Zaman, 2005; MacNeil & Li, 2006) and, secondly, regulators tend to put forward rather localized understandings of key corporate governance code concepts (e.g. Fiss & Zajac, 2004; Haxhi et al, 2013; Larsson-Olaison, 2019).

Thus, the focus here is on the third assumption presented above, that is how localized understandings and reinterpretations (e.g. Fiss & Zajac, 2004) foster divergence rather than convergence (e.g. Veldman & Wilmott, 2019). For example, an independent director is not necessarily an independent director in accordance with agency theory (Jensen & Meckling, 1976; Fama, 1980) and thus an Anglo-American control context, as for example the Swedish code entails two kinds of director independence: 1) that of independence vis-à-vis management, but also 2) that of independence vis-à-vis the largest shareholders. Furthermore and in line with different contexts and different codes, a committee can perform different tasks (Larsson-Olaison, 2019). Thus, there is
evidence of regulators adopting code provisions in line with a local translation process to fit the needs of local context as well as local interests (Haxhi et al, 2013).

The empirical setting of this study is Sweden, where the Swedish corporate governance code was introduced in 2005. The regulator’s ambition was to strengthen an active ownership function in listed corporations (SOU 2004:130; The Swedish Corporate Governance Board, 2019) and the code development process aimed at a best practice involving a significant influence of Swedish controlling shareholders (Jonnergård & Larsson, 2007). Therefore, one could claim that rather than international institutional investors capturing the regulator (Thomsen, 2006), in this specific context, it was the Swedish controlling shareholders that did so. However, not all controlling shareholders were involved. Rather, the more established and publicly known shareholders with moderate controlling stakes but without a majority shareholder stake (i.e. holding stakes 20% and above, but less than 50%) such as the prominent Wallenberg business group have been found to be treated as insiders to the process, while majority stake owners (more than 50%) were left outside and publicly protesting against the proposed code provisions (Jonnergård & Larsson, 2007; Jonnergård & Larsson-Olaison, 2017).

In line with the above, we formulate a competing hypothesis to that of corporate governance reform hypothesis and its perceived effect of international institutional investors. In line with that, the hypothesis, focuses on the influence of (at least some) controlling shareholders during the development process of the Swedish code. If the controlling shareholders had significant influence in the process as previous Swedish research shows (Jonnergård & Larsson, 2007; Jonnergård & Larsson-Olaison, 2017), we would expect the code to be in line with controlling shareholders’ interests, in which case they would comply with the code and not need to give any explanations for non-compliance.

Hypothesis 2a: Dispersed ownership is negatively related to code compliance.

Hypothesis 2b: The existence of controlling shareholders are positively related to code compliance.

Data, sample and variables

The study is built on a panel data set covering Swedish companies listed on Nasdaq OMX Stockholm 2012-2014). We included all companies that were listed on Nasdaq OMX Stockholm 2012-2014 with headquarters in Sweden. The population consists of 695 individual observations. After excluding companies closing the books on other dates than the year-end and companies lacking complete information, 633 company observations remain in our sample. This sample is representative in having no difference from the population in total in terms of market value.

Data on corporate governance code compliance is collected from company annual reports and corporate governance reports. Information on company characteristics is collected using the national database InfoTorg Företag, which gathered information directly from company annual reports. Information on boards, CEOs and auditors is collected from the annual publication of
“Directors and Auditors in Sweden’s listed companies, commonly used in previous research as it is considered reliable in information collected directly from annual reports and/or companies themselves (e.g. Jonnergård & Stafsudd, 2011). Finally, information on owners (and information on boards, CEOs and auditors as well as company characteristics when not included in the sources above) was collected through annual reports.

Dependent variable

We operationalize code compliance as the existence or not of explanations for non-compliance. The companies are legally required to present if, why, and which part of the code they diverge from. The compliance/non-compliance were coded as a dummy variable, with one for non-compliance.

Independent variables

Ownership concentration is operationalized into three different ownership concentration variables given the discussion in the theory section; low ownership concentration, moderate ownership concentration and majority ownership concentration.

Low ownership concentration (diffused ownership) is measured as the largest owner controlling less than 20% of the votes coded as 1 for companies with diffused ownership concentration and 0 for otherwise. This measure is based on previous research deeming 20% an appropriate threshold for identifying a control owner in both an international (Faccio et al, 2001), European (Desender et al, 2013) and Swedish context (Jansson & Larsson-Olaison, 2015).

Moderate ownership concentration (focused ownership) is measured as the largest owner controlling 20-49% of the votes, coded as 1 for companies with focused ownership concentration and 0 for otherwise.

Majority ownership concentration is measured as the largest owner controlling above 50% of the votes, coded as 1 for companies with majority ownership concentration and 0 for otherwise.

Control variables

We control for company characteristics similar to Tagesson & Collin (2016) such as firm performance, operationalized as ROA (natural log), debt-equity ratio and firm size, operationalized as the natural log of number of employees. We furthermore control for industry, using Nasdaq OMX Stockholm’s categorization into consumer goods, finance and real estate, general services, health care, industrial products and services, oil and gas, raw materials, services, telecom and technology, coded as 1 when the company is of that industry and 0 otherwise. In order to control for the embeddedness in the corporate governance system we used “years as listed on the Swedish stock exchange”.

Finally, we control for what year the company observation is from, operationalized as the dichotomous variables of 2012, 2013 and 2014, coded as 1 when the observation is from that year and 0 otherwise.
Results

In table 1 below descriptives and correlation analysis for all variables are presented.

As may be seen in table 1, the mean for non-compliance with the code in number of explanations is 0.66 with an even higher standard deviation of 0.88. About half of the companies fully complied with the code each year. In total, 291 explanations were made over the years, with one explanation being the most common, but number of explanations ranging from a minimum of zero to a maximum of five.

We note that 30% of the companies in the sample have a dispersed ownership concentration between 0-19 percent, while 52% have a moderate ownership concentration between 20-49 percent and 17% have a majority owner. The Swedish boards may be characterized as average-sized (seven directors), with about a fourth female directors, few Anglo-American ones, about a fourth female and being on average middle aged (57 years). Almost two thirds of the directors are independent, they have served on the board on average 6 years, sit on two to three other boards and together own on average 15 percent of the company. A little over a third of the CEOs serve on the board and it is just as unusual to have a female CEO as an Anglo-American one. The CEOs are a bit younger than the directors with an average age of 52 years, have served as CEOs nine years and own on average three percent of the company. The companies are almost all audited by a Big 4 auditor and 13 percent of them have a female auditor.

Table 2 includes a T-test of the difference of number of divergence from the code within the different groups of owner concentration. As may be noted there is a significant difference between the group of diffused ownership and majority ownership, and a difference on the 10% level between focused (moderate) ownership and majority ownership. Between the groups of diffused ownership and focused (moderate) ownership no significant difference exists.

In table 3 we show three different models of logistic regression. Our base model (model 3:1) shows our three ownership categories, while model 2 (model 3:1) includes all control variables. It should be noted here that we also control for industry and year, but that these results have been left out due to space requirements. Results are available from the authors. In the third model the corporate governance variables are added.
The base model (3:1) shows the same result as the t-test. Adding the control variables only concentrated ownership remains significant: on the 0.1% level when using focused as a reference variable and on the 0.05% level when using diffused as a reference variable. What remains significant in this model three versions is “years as listed” indicating that the embeddedness in the corporate governance system may be of importance.

Taking these results together we summarize the results as low ownership concentration having no relation and moderate ownership having no relation and majority ownership having a positive relation with number of explanations. Thus, hypothesis 1 that ownership concentration is negatively related to code compliance partly accepted, whereas hypothesis 2 rejected. The analysis shows that concentrated ownership is negative related to code compliance, while we may not show that diffused ownership is positively related.

**Discussion and final remarks**

This paper started off with the unresolved issue of whether the introduction of corporate governance codes should be understood as means to reform corporate governance favoring international institutional shareholders (Cicon et al, 2012; Thomsen, 2006) or whether the reflexive nature of such codes, through a series of local adoptions, instead end up strengthening already strong local actors (Collier & Zaman, 2005; Fiss & Zajac, 2004; Haxhi et al, 2013). The reflexive nature of codes (Cankar et al, 2010; Veldman & Wilmott, 2016) draws attention to the fact that best practice would imply that those actors that defined local best practice, would do so reflecting their own corporate governance practice. In Sweden, the actors that seemed to have the upper hand were the local controlling shareholders with moderate ownership stakes (Jonnergård & Larsson, 2007; Jonnergård & Larsson-Olaison, 2017). With this in mind, corporations with moderate controlling share stakes would not be assumed to need to deviate from the code and therefore explain their corporate governance arrangements to the same extent as corporations with other control arrangements. The other control arrangements studied here are corporations with low ownership concentration (under 20 percent) and corporations with a majority shareholder (above 50 percent). This was formulated as two competing overall competing hypotheses; the corporate governance reform hypothesis and the status quo hypothesis.

First, the corporate governance reform hypothesis would stipulate that corporations with an Anglo-American control situation (i.e. dispersed ownership or a low ownership concentration) would be the prime beneficiary of the corporate governance code as their control arrangement would be better in line with an international code regulation and, hence, very low non-compliance and few
explanations would be necessary. Simultaneously, according to the corporate governance reform hypothesis, corporations with controlling shareholders would be forced to non-compliance with the code and to explain many deviations; the larger the ownership stake, the more explanations. Based on our findings this hypothesis is not supported. Observing non-compliance, the Swedish code to some extent is more suited for corporations with an Anglo-American corporate control than to corporations with large stake controlling shareholders. This is consistent with the findings of Thomsen (2006) as well as Tagesson & Collin (2016). Hence, this could imply that, despite local adaptation, the Swedish corporate governance code is formulated in such a way that corporations with ownership structures more familiar to international institutional investors are favored.

Secondly, also consistent with the reform hypothesis we find that corporations with large controlling shareholder explain significantly more often than corporations with moderate stake controlling shareholders. This supports the findings of research on the Swedish corporate governance system, as previous research has highlighted the importance and the political and popular support for controlling shareholders (Jansson, 2013; Sinani et al 2008; Stafsudd, 2009). Where the dominant form of controlling shareholder in Sweden is often portrayed as the controlling shareholder of the moderate ownership concentration type, organized in business groups (e.g. Collin 1998; Jansson & Larsson-Olaison, 2015). This group of controlling shareholders was also the ones actively participating in the code development process (Jonnergård & Larsson, 2007), while many of the majority controlling shareholders were outside the process and very critical to it (cf. Jonnergård & Larsson-Olaison, 2017; Larsson-Olaison, 2019).

As a first conclusion then, the introduction of a corporate governance code could be interpreted as a sign of international institutional investors gaining in influence (cf. Thomsen, 2006). But it could also to some extent be interpreted as the code provides support for established corporate elite structures in relation to other - less favored - local elite groups (e.g. Haxhi et al, 2013). These findings provide for a theoretical contribution to comparative corporate governance research (e.g. Aguilera & Jackson, 2010), providing an example of how a blockholder systems (La Porta et al, 2000) is reflected in actual corporate governance regulation (e.g. Morck & Steier, 2004; Roe, 2000).

Furthermore, our findings are important for the corporate governance code literature more specifically. Research on the introduction of codes has treated the motive for codes as either an efficiency or a legitimacy one, based on the idea of legal origin (cf. Aguilera & Cuervo-Cazurra, 2004; Zattoni & Cuomo, 2008). In this case, Sweden’s introduction of a formally binding (albeit with the comply-or-explain mechanism) corporate governance code as late as 2005, would likely be interpreted as a legitimacy-based one. However, through the local adaptations (e.g. Collier & Zaman, 2005; Fiss & Zajac, 2004; Jonnergård & Larsson, 2007), a different sense of “efficiency” must be considered. First, efficiency favoring international institutional investors, hence supporting local capital markets with a stream of capital. And second, a form of “local efficiency” favoring certain local interest groups considered to be of the highest importance, i.e. Swedish moderate stake controlling shareholders facilitating an active ownership function as “best practice”. This highlights
the complexity of the concept “best practice”, where what is good for someone is not necessarily bad for someone else.

To be sure, there are some limitations in this study. First, the assumptions of the study (as described in the theory section) might not hold true. Previous research on corporate governance codes has found the issuing of codes to be situated somewhere between efficiency and legitimacy (e.g. Aguilera & Cuervo-Cazurra, 2004; Zattoni & Cuomo, 2008). We base our competing hypotheses on assumptions on the prevalence of efficiency. If instead legitimacy is thought more important, a more institutional theory-based explanation could apply. The largest controlling shareholders might not perceive the code as legitimate, or their situation makes them less exposed to external legitimacy pressures. If that is the case, these corporations might opt to explain as a protest, as the capital market is not necessarily a big pressure if the controlling shareholder already controls a majority of the votes on the AGM. Second, “explain” is perhaps not the best measurement of who benefits from the introduction of a corporate governance code. Compliance with the corporate governance codes has generally been very high historically, which could be understood as “one size actually fitting all” and codes indeed reflecting some form of generally accepted best corporate governance practice that applies regardless of corporate control environment, and local adaptations. Still, our findings are more in line with more recent studies (e.g. Seidl et al, 2013), showing that circa half of the Swedish companies show non-compliance with at least one rule in the Swedish corporate governance code, supporting a more fine-grained analysis of number of code explanations and our general conclusion that codes (at least in the blockholder system of Sweden) do not reflect the agency theory-inspired best practice of the U.S. and (its) international institutional investors, but may rather favor status quo and incumbent powerful elites.

References


Table 1. Correlation analysis with means and standard deviations.

Table 2: T-test for difference in divergences from the cod between diffused-focused-concentrated ownership

<table>
<thead>
<tr>
<th>Groups</th>
<th>T</th>
<th>df</th>
<th>significance</th>
</tr>
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<tbody>
<tr>
<td>Diffused – focused</td>
<td>-0.979</td>
<td>447.37</td>
<td>0.328</td>
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<td>Diffused - Concentrated</td>
<td>-2.302</td>
<td>320</td>
<td>0.022</td>
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<tr>
<td>Focused – Concentrated</td>
<td>-1.690</td>
<td>182.76</td>
<td>0.093</td>
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Table 3: Logistic regressions models

Table 3.1 Independent variables = ownership structures

<table>
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<tr>
<th></th>
<th>Model 1a</th>
<th>Model 1b</th>
<th>Model 1c</th>
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<tr>
<td></td>
<td>B</td>
<td>Std. error</td>
<td>Odds ratio</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.031</td>
<td>0.175</td>
<td>0.776</td>
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<td>Diffused</td>
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<td>Focused</td>
<td>-0.083</td>
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<td>0.686</td>
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<td>Concentrated</td>
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<tr>
<th></th>
<th>Model 1a</th>
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<tr>
<td>Model chi²</td>
<td>1.528</td>
<td>5.636*</td>
<td>8.205**</td>
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<td>-2 log likelihood</td>
<td>956,661</td>
<td>952,553</td>
<td>949,983</td>
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<tr>
<td>Overall classification</td>
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<td>55,8</td>
<td>55,8</td>
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<td>Cox &amp; Snell square</td>
<td>0.002</td>
<td>0.008</td>
<td>0.012</td>
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<tr>
<td>Nagelkerke R square</td>
<td>0.003</td>
<td>0.011</td>
<td>0.016</td>
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*** significance at the 0.001 level ** significance on the 0.05 level * significance on the 0.1 level
Tabel: 3:2 Independent variables: ownership structures and control variables

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<th>Model 2a</th>
<th>Model 2b</th>
<th>Model 2c</th>
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<td>Odds ratio</td>
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<tr>
<td>Constant</td>
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<td>0,400</td>
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<td>-0,403</td>
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<td>Concentrated</td>
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<tr>
<td>Years as listed</td>
<td>-0,009**</td>
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<tr>
<td>ROA (log)</td>
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<td>No. employees (log)</td>
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<td>Debt ratio</td>
<td>-0,009</td>
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<td>Controlled for years and industry</td>
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<th>Model 2a</th>
<th>Model 2b</th>
<th>Model 2c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model chi²</td>
<td>25,237**</td>
<td>27,521**</td>
<td>28,743***</td>
</tr>
<tr>
<td>-2 log likelihood</td>
<td>739,880</td>
<td>737,596</td>
<td>736,374</td>
</tr>
<tr>
<td></td>
<td>Overall classification</td>
<td>57,4%</td>
<td>58,1%</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Cox &amp; Snell square</td>
<td>0,045</td>
<td>0,048</td>
<td>0,051</td>
</tr>
<tr>
<td>Nagelkerke R square</td>
<td>0,059</td>
<td>0,065</td>
<td>0,068</td>
</tr>
</tbody>
</table>

*** significance at the 0.001 level ** significance on the 0.05 level * significance on the 0.1 level